

STATEMENT OF BASIS (AI No. 1951)

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0124061 to discharge to waters of the State of Louisiana.

THE APPLICANT IS: H2O Incorporated
Main Office
841 Vincent Rd.
Lafayette, LA 70508

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Yvonne Baker

DATE PREPARED: June 11, 2008

1. PERMIT STATUS**A. Reason For Permit Action:**

First time issuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term.

B. NPDES permit – NPDES permit effective date: N/A
NPDES permit expiration date: N/A
EPA has not retained enforcement authority.

C. LPDES permits –
LPDES permit effective date: N/A
LPDES permit expiration date: N/A

D. Date Application Received: December 28, 2007; additional information received January 18, 2008 and March 26, 2008. The facility submitted a Notice of Intent to discharge sanitary wastewater however, the facility discharges vehicle and equipment washwater and industrial stormwater as well. Therefore, an individual permit is being issued in lieu of the Light Commercial General Permit.

2. FACILITY INFORMATION**A. FACILITY TYPE/ACTIVITY - desalinization plant manufacturing facility**

H2O Incorporated manufactures desalinization plants for potable water production facilities. The facility discharges exterior vehicle and equipment washwater and treated sanitary wastewater. Two trucks and skidded equipment are pressure washed occasionally.

B. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: II; BPJ to 0 points based on minimal flow and similar discharges.
3. Wastewater Type: III
4. SIC code: 3599

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C. LOCATION - 841 Vincent Road in Lafayette, Lafayette Parish
Latitude 30° 07' 52", Longitude 92° 03' 18"

3. OUTFALL INFORMATION

Outfall 001

Discharge Type: treated sanitary wastewater
Treatment: septic tank
Location: at the point of discharge from the septic tank prior to mixing with waters of the State
Flow: 240 GPD; intermittent
Discharge Route: via local drainage thence into the Vermilion River

Outfall 002

Discharge Type: exterior vehicle and equipment washwater
Treatment: none
Location: at the point of discharge from the washing activity prior to mixing with waters of the State
Flow: intermittent
Discharge Route: via local drainage thence into the Vermilion River

4. RECEIVING WATERS

STREAM - via local drainage thence into the Vermilion River

BASIN AND SEGMENT - Vermilion - Teche Basin, Segment 060801

DESIGNATED USES -

- a. primary contact recreation
- b. secondary contact recreation
- c. propagation of fish and wildlife
- f. agriculture

5. TMDL STATUS

Subsegment 060801, Vermilion River-From LA-3073 bridge, is not listed on LDEQ's Final 2006 303(d) list as impaired. However, subsegment 060801 was previously listed as impaired for phosphorus, nitrogen, organic enrichment/ low DO, pathogen indicators, suspended solids/ turbidity/ siltation, and carbofuran, for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL's have been established for subsegment 060801:

Carbofuran

The TMDL for Carbofuran in the Mermentau and Vermilion Teche River Basins was final on March 21, 2002. No allocation was given to point source discharges in the Vermilion - Teche River Basin.

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According to the TMDL, there is only one point source in the Vermilion - Teche (FMC Corp. LA0064360) but it does not discharge Carbofuran. In addition, this facility has no potential to discharge Carbofuran. Therefore, requirements for Carbofuran will not be placed in this permit.

Suspended solids/turbidity/siltation

As per the TMDL for TSS, Turbidity, and Siltation for the 15 Subsegments in the Vermilion River Basin, point source loads are so small as to be insignificant, and because effective policies are in place to limit TSS discharges, no specific reductions from point sources are required. Standard TSS limitations are included in this permit.

Pathogen Indicators

Per *The Vermilion River Fecal Coliform TMDL*, there will be no change in the permit requirements based upon a wasteload allocation resulting from this TMDL. The pathogen indicators impairment shall be addressed through the standard fecal coliform limitations in this permit.

Organic Enrichment/Low DO

Per the EPA's *Vermilion River Dissolved Oxygen and Nitrogen TMDL*, the limits apply to sanitary discharges, and process outfalls of food processors and seafood processors. For discharges less than 25,000 GPD, secondary limits shall apply as per the TMDL. The organic enrichment/low DO impairment shall be addressed through the BOD₅ parameter for Outfall 001 and the COD parameter for Outfall 002.

Nitrogen

The TMDL for Dissolved Oxygen and Nutrients in the Vermilion River was final on April 5, 2001. No allocation was given to point source discharges in the Vermilion - Teche River Basin. LDEQ's position on nutrients, as supported by the ruling in *Sierra Club v. Givens*, 710 So.2d 249 (La. App. 1st Cir. 1997), writ denied, 705 So.2d 1106 (La. 1998), is that when oxygen-demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. LAC 33:IX.2707.D.1.f.iii allows the establishment of effluent limitations based on an indicator parameter for the pollutant of concern. LDEQ's consistent approach to controlling nutrients where the WQMP does not otherwise require specific nutrient limitations is achieved by limiting the discharge of oxygen-demanding substances through the COD and BOD₅ limitations. Compliance with the COD and BOD₅ limitations as the indicator parameters will result in the control of nutrients from the discharge sufficient to attain and maintain the applicable water quality standard. Effluent monitoring of the indicator parameter as conducted by the permittee in accordance with the effluent limitations of the permit in addition to LDEQ's ambient water quality monitoring program will allow for further evaluation by the Department to determine the effectiveness of the limitation. The reopener clause located in Other Conditions of the permit allows the Department to modify or revoke and reissue the permit if the limitations as set on the indicator parameter are shown to no longer attain and maintain applicable water quality standards.

Phosphorus

As per the February 29, 2000 Delist (Federal Register Notice: Vol. 65, Num. 173, pages 54032-54034, 9/6/2000), assessment of new data and information shows this segment is meeting water quality standards for Phosphorus. Therefore, requirements for total phosphorus were not included in this permit.

6. PROPOSED EFFLUENT LIMITS

BASIS - See Rationale below.

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7. COMPLIANCE HISTORY/COMMENTS

- A. OEC – An inspection on December 3, 2007 noted the facility is discharging without a permit. There are no recent enforcement actions on file at LDEQ.
- B. DMR Review/Excursions – N/A; initial permit.

8. ENDANGERED SPECIES

The receiving waterbody, Subsegment 060801 of the Vermilion - Teche Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 24, 2007 from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

9. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

10. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

11. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

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Rationale for H2O Incorporated

1. **Outfall 001** - treated sanitary wastewater, (estimated flow is 240 GPD; intermittent)

| <u>Pollutant</u> | <u>Limitation</u> Mo. Avg: Weekly Avg. (mg/l) | <u>Reference</u> |
|-----------------------------------|---|--------------------------------------|
| Flow (GPD) | ---:Report | |
| BOD | ---:45 | Similar discharges* (BPJ), LAG530000 |
| Fecal Coliform Colonies/100 ml | ---:400 (Daily Max) | Similar discharges* (BPJ), LAG530000 |
| TSS | ---:45 | Similar discharges* (BPJ), LAG530000 |
| pH | 6.0 - 9.0 su | Similar discharges* (BPJ), LAG530000 |

Treatment: septic tank

Monitoring Frequency: Semiannually for all parameters at the point of discharge from the septic tank prior to mixing with waters of the State.

Limits Justification: Limits and monitoring frequencies are based on current guidance for similar discharges from other industrial facilities and the Class I Sanitary General Permit, LAG530000 effective November 1, 2007.

2. **Outfall 002** – exterior equipment and vehicle washwater (estimated flow is intermittent)

| <u>Pollutant</u> | <u>Limitation</u> Mo. Avg: Daily Max (mg/L) | <u>Reference</u> |
|----------------------|---|---------------------------------------|
| Flow (GPD) | Report: Report | |
| TSS | ---:45 | Similar discharges * (BPJ), LAG480000 |
| COD | 200: 300 | Similar discharges * (BPJ), LAG480000 |
| Oil and Grease | ---:15 | Similar discharges * (BPJ), LAG480000 |
| pH | 6.0 - 9.0 su | Similar discharges * (BPJ), LAG480000 |
| Visible Sheen | ---: No Presence | Similar discharges * (BPJ), LAG480000 |
| Soaps and Detergents | Inventory Record: --- | Similar discharges * (BPJ), LAG480000 |

Treatment: none

Monitoring Frequency: daily for visible sheen and quarterly for flow, TSS, COD, oil and grease, and pH at the point of discharge from the washing activity prior to mixing with waters of the State. Soaps and Detergents: document in a quarterly inventory record the quantity and type of any Soap and/or Detergent used during each calendar month.

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Limits Justification: Limits and monitoring frequencies are based on current guidance for similar discharges from other facilities and the Light Commercial General Permit, LAG480000 effective August 1, 2001.

Note: EPA Guidelines for Metal Products & Machinery (40 CFR Part 438) are applicable; however, more stringent state requirements for exterior equipment washwater are being placed in the permit.

* Existing permits for similar outfalls
BPJ Best Professional Judgement
su Standard Units

NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

A SWP3 is included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water discharges shall not be required to obtain an LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.a-k, facilities classified as SIC code 3599 are considered to have storm water discharges associated with industrial activity.

The SWP3 shall be prepared, implemented, and maintained within (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in the storm water discharges associated with industrial activity at the facility (see Narrative Requirements for the AI).